

Title (en)

VISIBLE-LIGHT COMMUNICATION MIMO SYSTEM AND METHOD FOR REALIZING DATA TRANSCIVING THEREFOR

Title (de)

MIMO-SYSTEM ZUR KOMMUNIKATION MIT SICHTBAREM LICHT SOWIE SYSTEM UND VERFAHREN ZUR DURCHFÜHRUNG VON DATENSENDE-/EMPFANGSVORGÄNGEN DAFÜR

Title (fr)

SYSTÈME MIMO DE COMMUNICATION EN LUMIÈRE VISIBLE ET PROCÉDÉ ASSOCIÉ DE MISE EN UVRE DE L'ÉMISSION-RÉCEPTION DE DONNÉES

Publication

EP 3007370 A1 20160413 (EN)

Application

EP 13888256 A 20130830

Priority

- CN 201310260167 A 20130626
- CN 2013082648 W 20130830

Abstract (en)

A visible light communication MIMO system and a method for realizing data transceiving therefor are disclosed. The method includes: converting data of a sending end into two-dimensional code information containing locating information through light intensity modulation and compilation to send; a receiving end scanning received two-dimensional code information, and rectifying the received two-dimensional code information according to the locating information; and demodulating the rectified two-dimensional code information to obtain data. In the embodiments of the present invention, the rectification on the image with the geometric distortion is implemented by using the two-dimensional code technology, and the rectification on the plane image sent by an LED array in the visible light communication MIMO system is implemented, which guarantees that pixels of various points within one frame of image are simultaneously and correctly detected, and achieves the object of sending and receiving frames synchronously, thereby improving the data transmission efficiency.

IPC 8 full level

H04B 10/00 (2013.01); **H04B 10/116** (2013.01)

CPC (source: EP US)

H04B 7/0413 (2013.01 - US); **H04B 10/116** (2013.01 - EP US)

Cited by

US10164709B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3007370 A1 20160413; **EP 3007370 A4 20160706**; CN 104253646 A 20141231; CN 104253646 B 20181106; US 2016218803 A1 20160728; US 9967029 B2 20180508; WO 2014205911 A1 20141231

DOCDB simple family (application)

EP 13888256 A 20130830; CN 2013082648 W 20130830; CN 201310260167 A 20130626; US 201314392183 A 20130830